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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,083	08/06/2001	Akira Shimazu	450100-03438	1494

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FROMMER LAWRENCE & HAUG  
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NEW YORK, NY 10151

EXAMINER
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VAN HANDEL, MICHAEL P

ART UNIT	PAPER NUMBER
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2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/24/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

09/923,083

Applicant(s)

SHIMAZU ET AL.

Examiner

Michael Van Handel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is responsive to an Amendment filed 1/31/2007. Claims 1-11 are pending.  
Claims 1, 4, 8, 9, 11 are amended.

### ***Response to Arguments***

1. Applicant's arguments regarding claims 1, 4, 7, 8, 9, and 11, filed 1/31/2007, have been fully considered, but they are not persuasive.

Regarding claims 1, 4, 9, and 11, the applicant argues that Arsenault et al. fails to disclose that forefront data from a selected channel is reproduced ... and writes to the memory means the data following the forefront data from the selected channel simultaneously with reproduction of the forefront data, and after reproduction of the forefront data the following data is read from the memory means to be outputted continuously after the forefront data. The examiner respectfully disagrees. Arsenault et al. discloses a method and apparatus for providing a virtual video on demand service. The method and apparatus discloses the storing of a segment of the video program in advance for video-on-demand (VOD) viewing at a later time. When the subscriber selects a VOD service, a pre-stored video segment is retrieved for presentation to the subscriber. Remaining video program segments simultaneously broadcast on a plurality of channels are recorded in parallel while the pre-stored video program segment is retrieved and presented to the user (see Abstract; col. 11, l. 45-56; & Fig. 7A). This meets the limitation of "a control means to execute control in which the forefront data from a selected channel is

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reproduced by the digital signal reproduction means when the program is selected and writes to the memory means the data following the forefront data from the selected channel simultaneously with reproduction of the forefront data,” as currently claimed. Arsenault et al. further discloses splicing the pre-stored video program segment with the subsequent video program segment, so that when the end of the pre-stored video program segment is reached, the video signal is switched to the subsequent video program segment for continued playback (col. 15, l. 12-47 & Fig. 7B). This meets the limitation of “and after reproduction of the forefront data the following data is read from the memory means to be outputted continuously after the forefront data,” as currently claimed.

Further regarding claims **1**, **4**, **9**, and **11**, the applicant argues that Arsenault et al. fails to disclose that extracting time information in the program is provided so that time information of a clock function corresponds to the time information of the information extract means, and when the program is altered, the data recorded in the record means is recorded over again onto the forefront data of the altered program, employing the time information obtained in the time information extract means as a standard. The examiner respectfully disagrees. Arsenault et al. discloses that the video programs are encoded with program time stamps (PTS) and that a PTS time stamp is sent with each I-frame of the MPEG encoded data (col. 7, l. 50-60). Arsenault et al. further discloses assembling the program sub-segments at the receiver using the PTS time stamps. To splice segments together, the last I frame of a previous segment is spliced with the first I frame of a subsequent segment. Since the PTS provides an indication of the program time, it is used to match the I frames so that the segments may be properly spliced together (col. 15, l. 48-67 & col. 16, l. 1). This meets the limitation of “extracting time information in the program is

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provided,” as currently claimed. Arsenault et al. still further discloses that ambiguities caused by the wrap-around binary counter of the PTS are resolved by using a time-of-day clock in conjunction with the PTS (col. 16, l. 1-5). This meets the limitation of “so that time information of a clock function corresponds to the time information of the information extract means,” as currently claimed. Finally, Arsenault et al. still further discloses that the indicators that identify VOD services can be altered. If the VOD indicators are altered or removed, the pre-stored program segments with modified VOD indicators would no longer be relevant, and the irrelevant data would be recorded over (col. 16, l. 25-44). The examiner interprets the pre-stored program segments with modified VOD indicators to be altered programs. Thus, the altered pre-stored program data is recorded over again with new program data. The new program data is once again received and recorded using the PTS time stamps in conjunction with the time-of-day clock. This meets the limitation of “and when the program is altered, the data recorded in the record means is recorded over again onto the forefront data of the altered program, employing the time information obtained in the time information extract means as a standard,” as currently claimed.

Regarding claim 8, the applicant argues that the Office Action fails to point to any citation in Browne that teaches or suggests the time information obtained in the time information extract means is employed as time information of the control means so that the forefront data of the predetermined area on the hard disk is recorded. The examiner respectfully disagrees. Arsenault et al. discloses employing time information obtained in a time information extract means as time information of a control means so that forefront data is recorded on a hard disk (see relevant citations in above arguments). As noted in the Office Action mailed 10/18/2006,

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Arsenault et al. does not disclose that the forefront data is recorded on a predetermined area of the hard disk. In claim 8, as in claim 7, the examiner relies on Browne to teach using a fixed portion of a storage device for buffering video data. As such, the examiner believes that the claim was properly addressed in the previous Office Action.

Regarding claims 7 and 8, the applicant argues that there is no motivation to combine Arsenault et al. and Browne. The applicant specifically argues that there is no teaching, suggestion or motivation that comes from the references themselves, or from the problem to be solved, to combine the respective teachings to arrive at the Applicant's claimed invention. The examiner respectfully disagrees. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Arsenault et al. suggests retrieving data from a pre-stored segment and storing subsequent data in parallel using a disk drive (col. 11, l. 45-55). Arsenault et al. does not disclose that the forefront data is recorded on a predetermined area of the hard disk. The examiner relies on Browne to teach allocating a fixed portion of a storage device for buffering video data (p. 7, l. 19-32; p. 8, l. 1-5; & p. 20, l. 28-32). One of ordinary skill in the art would appreciate the use of particular areas of a single hard disk for particular functions, such as in partitioning hard drives into logical divisions, for the purpose of affording the user greater flexibility over the recording and replaying of programs (Browne p. 2, paragraph 1).

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Arsenault et al.

Referring to claims 1, 4, 9, and 11, Arsenault et al. discloses a video information reproducing apparatus/method (col. 1, l. 63-66)(Fig. 2) in a Near Video On Demand system in which the same program is distributed in a plurality of channels for a predetermined time difference (col. 11, l. 9-12)(Fig. 6), the video information reproducing apparatus comprising:

- a record means 232 (col. 6, l. 55-60) to record in advance forefront data of the program for the predetermined time difference (col. 11, l. 25-34 & Figs. 7A, 8A),
- a digital signal reproduction means 230 (col. 6, l. 66-67 & col. 7, l. 1) reproducing the forefront data of the predetermined time difference recorded in the record means (col. 11, l. 45-47),
- a memory means (buffer memory) that can perform data writing and data reading in parallel (col. 6, l. 60-66), and
- a control means 210 (col. 7, l. 6-9) to execute control in which the forefront data from a selected channel is reproduced by the digital signal reproduction means

when the program is selected and writes to the memory means the data following the forefront data from the selected channel simultaneously with reproduction of the forefront data, and after reproduction of the forefront data the following data is read from the memory means to be outputted continuously after the forefront data (col. 11, l. 45-55; col. 12, l. 8-20; col. 15, l. 12-40; & Figs. 7A, 7B),

- wherein the video information reproducing apparatus detects whether a distributed schedule information announces that the distributed schedule information is altered to include a new program and, in response, records forefront data for the new program to the record means (the examiner notes that the control center 102 associates indicators with programs in the program guide, indicating which VOD services are desired. The receiver 200 then receives the program guide from the satellite and scans it to find the video programs that have the associated service indicators. These programs are identified as programs to be recorded for VOD service. When these indicators are modified within the program guide, the schedule information provided by the control center 102 is altered.)(col. 7, l. 30-40; col. 9, l. 61-63; & col. 16, l. 8-34), and
- wherein a time information extract means extracting time information in the program is provided so that time information of a clock function corresponds to the time information of the information extract means, and when the program is altered, the data recorded in the record means is recorded over again onto the forefront data of the altered program, employing the time information obtained



in the time information extract means as a standard (the examiner notes that the indicators that identify VOD services can be altered. If the VOD indicators were altered or removed, the pre-stored program segments with modified VOD indicators would no longer be relevant, and the irrelevant data would be recorded over. The examiner further notes that, prior to storage, the packets of the received program are reassembled to produce the program according to the associated time code. A time-of-day clock is used in conjunction with the time code to eliminate ambiguities.)(col. 7, l. 50-60; col. 15, l. 48-67 & col. 16, l. 1-5, 25-44).

Referring to claims 2 and 5, Arsenault et al. discloses the video information reproducing apparatus as set forth in claims 1 and 4, respectively, wherein the time information obtained in the time information extract means is employed as time information of the control means (col. 16, l. 3-5).

Referring to claims 3, 6, and 10, Arsenault et al. discloses the video information reproducing apparatus as set forth in claims 1, 4 and 9, respectively, wherein the control means detects that the program is altered through schedule information distributed by one channel among the plurality of channels and extracts time information by the time information extract means based upon the detection result to alter the program (the examiner notes that the programs are altered through the program guide, which is distributed in the data stream from the satellite. See claim 1 above).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arsenault et al. in view of Browne et al.

Referring to claims 7 and 8, Arsenault et al. discloses the video information reproducing apparatus as set forth in claim 4, wherein the recording medium is comprised of a hard disk and wherein the time information obtained in the time information extract means is employed as time information of the control means (this limitation is met in the claim 2 citations above). Arsenault et al. also suggests retrieving data from a pre-stored segment and storing subsequent data in parallel using a disk drive (col. 11, l. 45-55). Arsenault et al. further discloses methods for achieving clean splicing from one of video program segment to the next (col. 15, l. 33-67 & col. 16, l. 1-5). Arsenault et al. does not disclose that the forefront data is recorded on a predetermined area of the hard disk. Browne et al. discloses a video recorder and playback system, wherein a user allocates a fixed portion of storage 104 for continuous FIFO buffering, while the rest of storage stores programming that the user desires to save (p. 7, l. 19-32; p. 8, l. 1-5; & p. 20, l. 28-32). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the disk drive of Arsenault et al. to be partitioned into logical spaces designated for different purposes, such as that taught by Browne et al. in order to

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afford the user greater flexibility over the recording and replaying of programs (Browne p. 2, paragraph 1).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Van Handel whose telephone number is 571-272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVH

  
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PRIMARY PATENT EXAMINER